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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,430	08/28/2003	Chih-Wei Chen	LA-7196-124	7234
167	7590	02/23/2006	EXAMINER	
FULBRIGHT AND JAWORSKI LLP 555 S. FLOWER STREET, 41ST FLOOR LOS ANGELES, CA 90071			PEYTON, TAMMARA R	
			ART UNIT	PAPER NUMBER
			2182	
DATE MAILED: 02/23/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/650,430

Applicant(s)

CHEN, CHIH-WEI

Examiner

Tammara R. Peyton

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeKoning et al., (US 6,178,520)

As per claims 1-5, 7, and 9, DeKoning teaches a computer system for dynamically accessing externally connecting storage devices, for allowing each of at least two of the storage devices to be dynamically connected to or separated from the computer system via a hot plug connection, the computer system comprising: a connection interface connected with the at least two storage devices; an input/output (I/O) control circuit for being connected with or separated from the at least two storage devices, wherein the I/O control circuit outputs an informing signal when a connection status between any of the at least two storage devices and the I/O control circuit changes;

a system control circuit connected with the I/O control circuit, for receiving the informing signal from the I/O control circuit and consequently outputting an interrupt request signal;

an interface control circuit connected with the connection interface, for controlling a transmission format and an interface format of the connection interface according to internally stored interface settings in the interface control circuit; and a central processing unit connected with the connection interface and the system control circuit, for accessing the at least two storage devices via the connection interface, and for receiving the interrupt request signal from the system control circuit to consequently determine if the interrupt request signal corresponds to a change of the connection status between the I/O control circuit and the at least two storage devices, wherein if yes, the central processing unit loads corresponding interface settings into the interface control circuit according to the number and arrangement of the storage devices thereby determined to be currently connected to the I/O control circuit.

DeKoning teaches of using device drivers within the storage controller (102 of figure 1) via storage system (100). DeKoning teaches that these drivers alert software modules of the events of insertion/removal for further processing, col. 3, lines 30 - 40) DeKoning teaches that sub system monitor (208 of figure 2) polls all the attached devices on bus 150 using driver of 202. DeKoning teaches that a variety of signals may be utilized to convey the detection, which would comprise the interrupt system to CPU 112 of figure 1, col. 7, lines 56 - 59. Hot swap monitor 210 of figure 2 receives the

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notification and relays the event to configuration manager 206 to trigger appropriate action, col 8, lines 1 - 5). DeKoning does not expressly teach the I/O control circuit is a super I/O chip. It would have been obvious to one of ordinary skill in the art to use a super I/O chip as it standardizes and simplifies the design of the system, and thus reduces cost. DeKoning also does not expressly teach wherein the system control circuit is a south bridge chip, however, it would have been obvious to one of ordinary skill in the art to use a south bridge chip as it incorporates a number of different controller functions.

As per claim 6, DeKoning teaches wherein the I/O control circuit has one or more I/O ports for being connected with the storage devices.

As per claim 8, DeKoning does not expressly teach wherein the I/O port is a GPIO (General-purpose Input Output) port. However the use of GPIO ports are notoriously well known in the art. It would have been obvious to one of ordinary skill in the art to use GPIO ports as they provide the capability to support several functions thus improving flexibility in a system.

As per claim 10, DeKoning does not expressly teach wherein the disk drive interface is of a format selected from the group consisting of IDE (Integrated Device Electronics) format, E-IDE (Enhanced-IDE) format, ATA (Advanced Technology

Attachment) format, and ATAPI (ATA Packet Interface) format. However the use of these well-known disk drive interfaces would be obvious to one of ordinary skill.

### ***Conclusion***

Applicant's arguments are moot based on the new grounds of rejections.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammara Peyton whose telephone number is (571) 272-4157. The examiner can normally be reached between 6:30 - 4:00 from Monday to Thursday, (I am off every first Friday), and 6:30-3:00 every second Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim

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Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-2100.

Mailed responses to this action should be sent to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231.

Faxes for Official/formal (After Final) communications or for informal or draft communications (please label "PROPOSED" or "DRAFT") sent to:

(571) 273-8300

Hand-delivered responses should be brought to:

USTPO, Randolph Building, Customer Service Window

401 Dulany Street

Alexandria, VA 22314.

**TAMMARA PEYTON**  
**PRIMARY EXAMINER**



Tammara Peyton

February 13, 2006